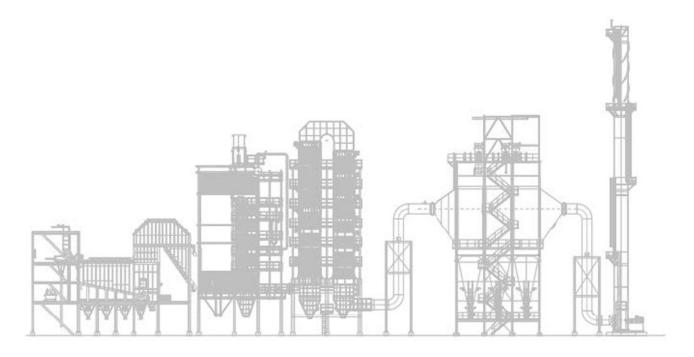
Feb 2025



# **List of References**

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For any further information and support, please feel welcome to contact us directly: sales@de.lawipower.com

**Renewable** Power Plant Technology



# 27.5 MWth Industrial Waste Power Plant, Busan | South Korea - LAWI EtaComb® 300

## Scheduled to be commissioned in: July 2025

**Design Fuel:** Industrial Waste, SRF **Location:** Busan | South Korea

#### **Technical Project Data:**

Firing Capacity: 27.5 MWth BMCR: 37.5 tph Steam Parameter: 40 bar(a) | 300°C Plant Type: Power Generation

# LAWI Scope of Work:

- Detail Design & Engineering: LAWI EtaPlant® WtE Boiler Island
- EP Supply: - LAWI EtaComb® 300 WtE Combustion System Components - Water-Cooled Moving Grate
  - Fuel Dosing System

# 16.6 MWth SRF Power Plant, Yeoncheon | South Korea - LAWI EtaComb® 200

# Commissionend since: June 2022

**Design Fuel:** Industrial Waste, SRF **Location:** Yeoncheon | South Korea

# **Technical Project Data:**

Firing Capacity: 16.6 MWth BMCR: 20 tph Steam Parameter: 19 bar(a) | 211°C Plant Type: Heat Generation Plant Capacity: 12.3 MWth

- Detail Design & Engineering: LAWI EtaPlant® WtE Boiler Island
- EP Supply:
  - LAWI EtaComb® 200 WtE Combustion System
  - Water-Cooled Moving Grate
  - *LAWI EtaLogic*® Control & Optimization System (PLC)



# 9.9 MWel CHP Rice Husk Power Plant, Kamphaeng Phet | Thailand - LAWI EtaPlant®

## **Commissionend since: April 2022**

**Design Fuel:** Rice Husk, Wood Chip **Location:** Kamphaeng Phet | Thailand

## **Technical Project Data:**

Firing Capacity: 75.5 MWth BMCR: 85 tph Steam Parameter: 66 bar(a) | 480°C Plant Type: Heat & Power Generation Plant Capacity: 9.9 MWel

# LAWI Scope of Work:

- EP Supply: LAWI EtaPlant® Boiler Island:
  - LAWI EtaComb® 800 Combustion System
  - 4-Lane Fuel Dosing System
  - Moving Grates
  - Steam Boiler & Feed Water System
  - Ash Handling & Ash Storage System
  - LAWI EtaLogic® Control & Optimization System

# 9.9 MWel Wood Chip Power Plant, Yala II | Thailand - LAWI EtaComb® Combustion Equipment

# Commissionend since: January 2021

Design Fuel: Wood Chip Location: Yala | Thailand

# **Technical Project Data:**

Firing Capacity: 40 MWth BMCR: 45 tph Steam Parameter: 90 bar(a) | 515°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

- EP Supply:
  - Moving Grate
  - Fuel Dosing System
  - Hydraulic System & Combustion Instruments



# 9.9 MWel Biomass Power Plant, Yala I | Thailand - LAWI EtaComb® Combustion Equipment

# **Commissionend since: December 2020**

**Design Fuel:** Wood Chip **Location:** Yala | Thailand

# **Technical Project Data:**

Firing Capacity: 40 MWth BMCR: 45 tph Steam Parameter: 90 bar(a) | 515°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

# LAWI Scope of Work:

- EP Supply:
  - Moving Grate
  - Fuel Dosing System
  - Hydraulic System & Combustion Instruments

# 28 MWel Multi Fuel Biomass Power Plant, Suphan Buri | Thailand - LAWI EtaComb® 1000

# Commissionend since: April 2020

**Design Fuel:** Rice Husk, Wood Chip, Bagasse, Wood Bark **Location:** Suphan Buri | Thailand

# **Technical Project Data:**

Firing Capacity: 93.7 MWth BMCR: 115 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 28 MWel

# LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- Owner's Consultant (Tech.)
- EP Supply: *LAWI EtaComb*® 1000 Combustion System
  - Boxer Type 6 Lane adiabatic Multi-Fuel

Combustion with Post-Combustion

- 2x 3-Lane Fuel Dosing System
- Moving Grate
- Air System with Recirculation Gas
- LAWI EtaLogic® Control & Optimization System



# 7 MWel RDF Power Plant, Ayutthaya | Thailand - LAWI EtaPlant®

# **Commissionend since: October 2019**

**Design Fuel:** RDF from Industrial Waste **Location:** Ayutthaya | Thailand

# **Technical Project Data:**

Firing Capacity: 30 MWth BMCR: 35 tph Steam Parameter: 53 bar(a) | 450°C Plant Type: Power Generation Plant Capacity: 7 MWel

# LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: LAWI EtaPlant® WtE Boiler Island:
  - LAWI EtaComb® 300 Combustion System
  - Water Cooled Moving Grate
  - Steam Boiler & Feed Water System
  - Ash Handling & Ash Storage System
  - LAWI EtaLogic® Control & Optimization System

# 9.9 MWel Multi Fuel Power Plant, Nakhon Ratchasima | Thailand - LAWI EtaComb® 400

# Commissionend since: June 2019

**Design Fuel:** Eucalyptus Bark, Wood Chip (Supplemental: Bagasse, Cassava, EFB) **Location:** Nakhon Ratchasima | Thailand

# **Technical Project Data:**

Firing Capacity: 37 MWth BMCR: 43 tph Steam Parameter: 69 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Adiabatic Multi-Fuel Combustion with Post-Combustion
  - 3-Lane Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas



# 8 MWel Biomass & Coal Co-Firing Power Plant, Trincomalee | Sri Lanka - LAWI EtaComb® 350

# Commissionend since: October 2017

Design Fuel: Rice Husk, Gliricidia, Coal Location: Trincomalee | Sri Lanka

## **Technical Project Data:**

Firing Capacity: 32 MWth BMCR: 36 tph Steam Parameter: 65.7 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 8 MWel

## LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- Owner's Consultant (Tech.)
- EP Supply: *LAWI EtaComb*® 350 Combustion System
  - adiabatic Multi-Fuel Combustion with Post-Combustion
  - Air System with Recirculation Gas
  - Fuel Conveying System
  - Ash Handling System

# 9.5 MWel Multi-Fuel Biomass Power Plant, Songhkla | Thailand - LAWI EtaPlant®

# Commissionend since: August 2017

Design Fuel: Para Wood, Para Root Location: Songkhla | Thailand

# **Technical Project Data:**

Firing Capacity: 40 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.5 MWel

- Overall Power Plant EPC LAWI EtaPlant® Turn-Key
- EPC Supply of complete Power Plant:
  - Buildings & Civil Works
  - Fuel Handling System; Ash Handling & Storage System
  - LAWI EtaComb® 400 Combustion System
  - Flue Gas Treatment System (ESP)
  - Turbine and Generator System
  - DCS & LAWI EtaLogic® Optimization System



# 12 MWel Gliricidia Power Plant, Viti Levu | Fiji - LAWI EtaPlant®

## **Commissionend since: August 2017**

Design Fuel: Gliricidia Location: Nabou of Viti Levu | Fiji

## **Technical Project Data:**

Firing Capacity: 51.2 MWth BMCR: 57 tph Steam Parameter: 36.3 bar(a) | 440 °C Plant Type: Power Generation Plant Capacity: 12 MWel

## LAWI Scope of Work:

- EP Supply: *LAWI EtaPlant*® Boiler Island:
  - LAWI EtaComb® 500 Combustion System
  - Steam Boiler & Feed Water System
  - Flue Gas Treatment System
  - Fuel Handling System
  - Ash Handling System
  - DCS & LAWI EtaLogic® Optimization System

# 9.4 MWel RDF Power Plant, Saraburi | Thailand - LAWI EtaPlant® WtE Boiler Island

## Commissionend since: June 2017

**Design Fuel:** RDF from MSW, Industrial Waste and Landfill Waste **Location:** Saraburi | Thailand

# **Technical Project Data:**

Firing Capacity: 43 MWth BMCR: 50 tph Steam Parameter: 53 bar(a) | 450°C Plant Type: Power Generation Plant Capacity: 9.4 MWel

- EPC Supply: LAWI EtaPlant® WtE Boiler Island:
   LAWI EtaComb® 450 Combustion System incl.
  Water Cooled Moving Grates
  - Steam Boiler & Feed Water System
  - Air System & Stack
  - Ash Handling & Ash Storage System



# 11 MWel Multi-Fuel Biomass Power Plant, Kamphaeng Phet | Thailand - LAWI EtaComb® 400

## Commissionend since: May 2017

Design Fuel: Rice Husk, Eucalyptus Bark, Wood Chip Location: Kamphaeng Phet | Thailand

## **Technical Project Data:**

Firing Capacity: 40.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 490°C Plant Type: Power Generation Plant Capacity: 11 MWel

# LAWI Scope of Work:

• EPC Supply: *LAWI EtaComb*® 400 Combustion System

- Adiabatic Multi-Fuel Combustion with Post-Combustion

- 3-Lane Fuel Dosing System
- Moving Grate
- Air System with Recirculation Gas

# 9.9 MWel EFB Power Plant, Nakhon Si Thammarat | Thailand - LAWI EtaComb® 400

## **Commissionend since: October 2016**

**Design Fuel:** Para Wood, EFB, Palm Frond **Location:** Nakhon Si Thammarat | Thailand

# **Technical Project Data:**

Firing Capacity: 41 MWth BMCR: 45 tph Steam Parameter: 67 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

## LAWI Scope of Work:

- EP Supply: *LAWI EtaComb*® 400 Combustion System
  - Multi-Fuel 3-Lane adiabatic Combustion Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas
  - Combustion Instruments

WINNER OF THAILAND ENERGY AWARD 2019 WINNER OF ASEAN ENEGRY AWARD 2019



# 9.9 MWel Biomass Power Plant, Nakhon Sawan | Thailand - LAWI EtaComb® 600 - WINNER OF THAILAND ENERGY AWARD 2018

# Commissionend since: September 2015 Design Fuel: Rice Husk, Wood Chip

Location: Nakhon Sawan | Thailand

# **Technical Project Data:**

Firing Capacity: 60 MWth BMCR: 65 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

## LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EP Supply: *LAWI EtaComb*® 600 Combustion System
  - Multi-Fuel 3-Lane adiabatic Combustion Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas

#### WINNER OF THAILAND ENERGY AWARD 2018

# 9.9 MWel Biomass Power Plant, Buriram | Thailand - LAWI EtaComb® 450

# Commissionend since: June 2015

Design Fuel: Eucalyptus Bark, Wood Chip Location: Buriram | Thailand

# **Technical Project Data:**

Firing Capacity: 41 MWth BMCR: 45 tph Steam Parameter: 67 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

- Overall Power Plant Basic Engineering
- Owner's Consultant (Tech.)
- EPC Supply: *LAWI EtaComb*® 450 Combustion System
  - Adiabatic Combustion with Post-Combustion Chamber
  - Moving Grate
  - Fuel Dosing System
  - Air System with Recirculation Gas
  - DCS Control System (Programming)
  - Steam Boiler & Feed Water System (Installation
  - & Commissioning)



# 9.9 MWel High Moisture Biomass Power Plant, Sirindhorn | Thailand - LAWI EtaComb® 400

#### Commissionend since: May 2015

**Design Fuel:** Eucalyptus Bark, Wood Chip **Location:** Sirindhorn, Ubon Ratchathani | Thailand

#### **Technical Project Data:**

Firing Capacity: 39.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

# LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Multi-Fuel 3-Lane adiabatic Combustion Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas

# 9.9 MWel Multi-Fuel Power Plant, Phichit | Thailand - LAWI EtaComb® 400 - WINNER OF THAILAND ENERGY AWARD 2018

## **Commissionend since: April 2015**

**Design Fuel:** Rice Husk, Eucalyptus Bark **Location:** Phichit | Thailand

# **Technical Project Data:**

Firing Capacity: 40.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

# LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Multi-Fuel 3-Lane adiabatic Combustion Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas
  - Fuel Conveying System

#### WINNER OF THAILAND ENERGY AWARD 2018



# 9.9 MWel Eucalyptus Bark Power Plant, Thoen | Thailand - LAWI EtaComb® 400

## **Commissionend since: July 2014**

Design Fuel: Eucalyptus Bark, Wood Chip Location: Thoen, Lampang | Thailand

## **Technical Project Data:**

Firing Capacity: 39.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

## LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Multi-Fuel 3-Lane adiabatic Combustion Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas

# 6 MWel Gliricidia Power Plant, Mahiyangana | Sri Lanka - LAWI EtaComb® 300

## Commissionend since: June 2014

Design Fuel: Gliricidia Location: Mahiyangana | Sri Lanka

# **Technical Project Data:**

Firing Capacity: 27.5 MWth BMCR: 31.5 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 6 MWel

- Overall Power Plant Basic Engineering
- Owner's Consultant (Tech.)
- EP Supply: *LAWI EtaComb*® 300 Combustion System
  - adiabatic Multi-Fuel Combustion with Post-Combustion
  - Air System with Recirculation Gas
  - Fuel Conveying System
  - Ash Handling System



# 9.9 MWel Multi Fuel Power Plant, Si Chiang Mai | Thailand - LAWI EtaComb® 400

# **Commissionend since: December 2013**

Design Fuel: Eucalyptus Bark, Wood Chip Location: Si Chiang Mai, Nong Khai | Thailand

# **Technical Project Data:**

Firing Capacity: 39.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

# LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System:

- Multi-Fuel High Moisture 3-Lane adiabatic Combustion Chamber with two-stage Air-Preheating

- Fuel Dosing System
- Moving Grate
- Air System with Recirculation Gas

# 9.9 MWel Eucalyptus Bark Power Plant, Buriram | Thailand - LAWI EtaComb® 450

# Commissionend since: November 2013

Design Fuel: Eucalyptus Bark, Wood Chip Location: Buriram | Thailand

# **Technical Project Data:**

Firing Capacity: 41 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Adiabatic Combustion with Post-Combustion Chamber
  - Chamber
  - Moving Grate
  - Fuel Dosing System
  - Air System with Recirculation Gas



# 9.9 MWel Wood Chip Power Plant, Kalasin | Thailand - LAWI EtaComb® 400

## **Commissionend since: November 2013**

Design Fuel: Wood Chip, Rice Husk Location: Kalasin | Thailand

## **Technical Project Data:**

Firing Capacity: 40.5 MWth BMCR: 45 tph Steam Parameter: 67 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

## LAWI Scope of Work:

- Combustion System Revamping of existing Power Plant for Efficiency Increase
- EPC Supply: *LAWI EtaComb*® 400 Combustion System:

- Multi-Fuel 3-Lane adiabatic Combustion Chamber

- Fuel Dosing System
- Moving Grate
- Air System with Recirculation Gas
- Integration of LAWI EtaComb® in existing Waste Heat Boiler

# 9.9 MWel Biomass Power Plant, Phon Thong | Thailand - LAWI EtaComb® 400

#### **Commissionend since: June 2013**

**Design Fuel:** Eucalyptus Bark, Wood Chip **Location:** Phon Thong, Roi Et | Thailand

#### **Technical Project Data:**

Firing Capacity: 39.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

#### LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Multi-Fuel High Moisture 3-Lane adiabatic

Combustion Chamber with two-stage Air-

- Preheating
- Fuel Dosing System
- Moving Grate
- Air System with Recirculation Gas



# 20 MWel Multi Fuel Power Plant, Khon Kaen | Thailand - LAWI EtaComb® 400

## **Commissionend since: April 2013**

Design Fuel: Wood Chip, Rice Husk Location: Khon Kaen | Thailand

## **Technical Project Data:**

Firing Capacity: 2x 40 MWth BMCR: 88 tph Steam Parameter: 67 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 2x 9.9 MWel

# LAWI Scope of Work:

- Overall Power Plant Basic Engineering and Consultancy
- EP Supply: *LAWI EtaComb*® 400 Combustion System
  - Twin Type 2x 3-Lane adiabatic Multi-Fuel
  - Combustion with Post-Combustion
  - 2x 3-Lane Fuel Dosing System
  - Air System with Recirculation Gas
  - LAWI EtaLogic® Control & Optimization System

# 9.9 MWel Para Wood Power Plant, Thung Song | Thailand - LAWI EtaComb® 400 - WINNER OF THAILAND ENERGY AWARD 2018

#### **Commissionend since: March 2013**

Design Fuel: Para Wood Location: Thung Song, Nakhon Si Thammarat | Thailand

# **Technical Project Data:**

Firing Capacity: 40 MWth BMCR: 45 tph Steam Parameter: 67 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

# LAWI Scope of Work:

- EP Supply: *LAWI EtaComb*<sup>®</sup> 400 Combustion System
  - Adiabatic Combustion with Post-Combustion
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas
  - DCS Control System (Programming)

#### WINNER OF THAILAND ENERGY AWARD 2018



# 9.9 MWel Eucalyptus Bark Power Plant, Chok Chai | Thailand - LAWI EtaComb® 400

# Commissionend since: January 2013

Design Fuel: Eucalyptus Bark, Wood Chip Location: Chok Chai | Thailand

# **Technical Project Data:**

Firing Capacity: 39.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

# LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System

- Multi-Fuel High Moisture 3-Lane adiabatic Combustion Chamber with two-stage Air-Preheating

- Fuel Dosing System
- Moving Grate
- Air System with Recirculation Gas

# 7.5 MWel Eucalyptus Bark Power Plant, Kamphaeng Phet | Thailand - LAWI EtaComb® 300

# Commissionend since: December 2012

**Design Fuel:** Wood Chip, Eucalyptus Bark **Location:** Kamphaeng Phet | Thailand

# **Technical Project Data:**

Firing Capacity: 30 MWth BMCR: 33 tph Steam Parameter: 66 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 7.5 MWel

## LAWI Scope of Work:

- Overall Power Plant Detail Engineering
- EPC Supply (Consortium partner): Complete Power Plant
  - Buildings & Civil Works
  - Fuel Handling System; Ash Handling & Storage System
  - LAWI EtaComb® 400 Combustion System
  - Flue Gas Treatment System (ESP)
  - Turbine and Generator System
  - DCS & LAWI EtaLogic® Optimization System

#### WINNER OF THAILAND ENERGY AWARD 2015



# 9.9 MWel Biomass Power Plant, Prasat | Thailand - LAWI EtaComb® 400

# **Commissionend since: October 2012**

Design Fuel: Eucalyptus Bark, Wood Chip Location: Prasat, Surin | Thailand

# **Technical Project Data:**

Firing Capacity: 39.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

# LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*<sup>®</sup> 400 Combustion System

- Multi-Fuel High Moisture 3-Lane adiabatic Combustion Chamber with two-stage Air-Preheating

- Fuel Dosing System
- Moving Grate
- Air System with Recirculation Gas

# 17 MWel Multi Fuel Power Plant, Surin | Thailand - LAWI EtaComb® 600

## **Commissionend since: September 2012**

**Design Fuel:** Eucalyptus Bark, Wood Chip, Rice Husk **Location:** Surin | Thailand

# **Technical Project Data:**

Firing Capacity: 60 MWth BMCR: 67 tph Steam Parameter: 66 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 17 MWel

- Overall Power Plant Basic Engineering
- Overall Power Plant Project Management
- EPC Supply: *LAWI EtaComb*® 600 Combustion System
  - Multi fuel adiabatic Combustion Chamber with Post-Combustion
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas
  - Combustion & Boiler Instruments



# 9.9 MWel Biomass Power Plant, Roi Et | Thailand - LAWI EtaComb® 400 - WINNER OF THAILAND ENERGY AWARD 2014

#### Commissionend since: June 2012

**Design Fuel:** Eucalyptus Bark, Rice Husk **Location:** Roi Et | Thailand

## **Technical Project Data:**

Firing Capacity: 40 MWth BMCR: 45 tph Steam Parameter: 66 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

## LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Multi-fuel 3-lane adiabatic Combustion
  - Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas

#### WINNER OF THAILAND ENERGY AWARD 2014

# 9.9 MWel Biomass Power Plant, Nam Phong | Thailand - LAWI EtaComb® 400

#### Commissionend since: May 2012

**Design Fuel:** Eucalyptus Bark, Wood Chip **Location:** Nam Phong, Khon Kaen | Thailand

# **Technical Project Data:**

Firing Capacity: 39.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Multi-Fuel High Moisture 3-Lane adiabatic
  - Combustion Chamber with two-stage Air-
  - Preheating
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas



# 9.9 MWel Eucalyptus Bark Power Plant, Ban Bueng | Thailand - LAWI EtaComb® 400

## **Commissionend since: April 2012**

Design Fuel: Eucalyptus Bark, Wood Chip Location: Ban Bueng, Chonburi | Thailand

## **Technical Project Data:**

Firing Capacity: 39.5 MWth BMCR: 45 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

## LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System

- Multi-Fuel High Moisture 3-Lane adiabatic Combustion Chamber with two-stage Air-Preheating

- Fuel Dosing System
- Moving Grate
- Air System with Recirculation Gas

# 9.9 MWel Multi Fuel Power Plant, Thap Sakae | Thailand - LAWI EtaComb® 400

#### **Commissionend since: October 2011**

**Design Fuel:** Wood Chip, Coconut fiber, Palm Stalk **Location:** Thap Sakae, Prachuap Khiri Khan | Thailand

# **Technical Project Data:**

Firing Capacity: 40 MWth BMCR: 45 tph Steam Parameter: 42 bar(a) | 450°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Multi-Fuel 3-Lane adiabatic Combustion
  - Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas
  - Fuel Conveying + Deashing System



# 9.9 MW Rice Husk Power Plant, Nakhon Ratchasima | Thailand - LAWI EtaComb® 400

#### Commissionend since: May 2011

Design Fuel: Rice Husk Location: Nakhon Ratchasima | Thailand

## **Technical Project Data:**

Firing Capacity: 40 MWth BMCR: 45 tph Steam Parameter: 67 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

## LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 400 Combustion System
  - Multi-Fuel 3-Lane adiabatic Combustion Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas

# 9.9 MWel Bagasse CHP Power Plant, Utai Thani | Thailand - LAWI EtaComb® 600

## **Commissionend since: February 2011**

**Design Fuel:** Bagasse **Location:** Utai Thani | Thailand

# **Technical Project Data:**

Firing Capacity: 55 MWth BMCR: 60 tph Steam Parameter: 68 bar(a) | 485°C Plant Type: Heat & Power Generation Plant Capacity: 9.9 MWel

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 600 Combustion System
  - Multi-Fuel 3-Lane adiabatic Combustion Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas
  - Boiler & Combustion Control Programming



# 9.5 MWel Biomass Power Plant, Chumporn | Thailand - LAWI EtaComb® 500

Commissionend since: April 2009

**Design Fuel:** Palm Leaves, EFB **Location:** Chumporn | Thailand

## **Technical Project Data:**

Firing Capacity: 48.4 MWth BMCR: 50 tph Steam Parameter: 42 bar(a) | 410°C Plant Type: Power Generation Plant Capacity: 9.5 MWel

## LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 500 Combustion System
  - Multi-Fuel 3-Lane adiabatic Combustion Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas
  - Control System

# 7.5 MWel Rice Husk Power Plant, Chon Buri | Thailand - LAWI EtaComb® 300

# Commissionend since: March 2009 Design Fuel: Rice Husk

Location: Chon Buri, Thailand

# **Technical Project Data:**

Firing Capacity: 32.5 MWth BMCR: 35 tph Steam Parameter: 69 bar(a) | 490°C Plant Type: Power Generation Plant Capacity: 7.5 MWel

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® *300* Combustion System
  - adiabatic Combustion Chamber
  - Fuel Dosing System
  - Moving Grate
  - Air System with Recirculation Gas
  - Combustion Instruments
  - Bottom Ash Handling System
  - PLC Control System for Steam Boiler



# 9.5 MWel Biomass Power Plant, Buriram | Thailand - LAWI EtaComb® 500

## **Commissionend since: October 2008**

Design Fuel: Rice Husk, Woodchip Location: Buriram | Thailand

## **Technical Project Data:**

Firing Capacity: 50 MWth BMCR: 55 tph Steam Parameter: 66 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.5 MWel

## LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 500 Combustion System
  - Moving Grate
  - Fuel Dosing System
  - Fuel & Ash Handling System
  - DCS Control System

# 10 MWel Multi Fuel Biomass Power Plant, Trincomalee | Sri Lanka - LAWI EtaComb® 500

## **Commissionend since: August 2008**

**Design Fuel:** Rice Husk, Wood Chip, Coconut Shell, Municipal Green Waste **Location:** Trincomalee | Sri Lanka

# **Technical Project Data:**

Firing Capacity: 47 MWth BMCR: 50 tph Steam Parameter: 55 bar(a) | 455°C Plant Type: Power Generation Plant Capacity: 10 MWel

- Overall Power Plant Basic Engineering
- EP Supply: *LAWI EtaComb*® 500 Combustion System
  - adiabatic Multi-Fuel Combustion with Post-Combustion
  - Air System with Recirculation Gas
  - Fuel Conveying System
  - Ash Handling System



# 9.9 MWel Biomass Power Plant, Ubon Ratchathani | Thailand - LAWI EtaComb® 500

Commissionend since: June 2008

Design Fuel: Rice Husk, Corn Cob Location: Ubon Ratchathani | Thailand

## **Technical Project Data:**

Firing Capacity: 50 MWth BMCR: 55 tph Steam Parameter: 66 bar(a) | 485°C Plant Type: Power Generation Plant Capacity: 9.9 MWel

## LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 500 Combustion System
  - Moving Grate
  - Fuel Dosing System
  - PLC Control System for Steam Boiler

# 7.3 MWel Rice Husk Power Plant, Nakhon Ratchasima | Thailand - LAWI EtaComb® 300

Commissionend since: October 2007 Design Fuel: Rice Husk Location: Nakhon Ratchasima | Thailand

#### **Technical Project Data:**

Firing Capacity: 30 MWth BMCR: 35 tph Steam Parameter: 40 bar(a) | 450°C Plant Type: Power Generation Plant Capacity: 7.3 MWel LAWI Scope of Work:

- Overall Power Plant Basic Engineering
- EPC Supply: *LAWI EtaComb*® 300 Combustion System

# 22 MW Biomass Power Plant, Midland | USA

# Commissionend since: January 2004

Design Fuel: Waste Wood Chip, Wood Dust Location: Midland | USA

# LAWI Scope of Work:

**Overall Power Plant Basic Engineering** Engineering of Moving Grate Furnace 27m<sup>2</sup> with Thermal Oil Heater



# 12 MW Biomass Power Plant, Samut Sakhon | Thailand

Commissionend since: December 2003 Design Fuel: Waste Wood Chip, Wood Dust Location: Samut Sakhon | Thailand

## LAWI Scope of Work:

Engineering of Moving Grate Furnace 16m<sup>2</sup> with Thermal Oil Heater

# 11 MWth Waste Wood Chip Power Plant, Phang Nga | Thailand

Commissionend since: April 2003 Design Fuel: Waste Wood Chip Location: Phang Nga | Thailand LAWI Scope of Work: Engineering of Moving Grate Furnace 27m<sup>2</sup> with Thermal Oil Heater 280°C

# 6.4 MW Biomass CHP Power Plant, Pavia | Italy - LAWI EtaComb® 400

#### Commissionend since: June 2002

Design Fuel: Rice Husk, Waste Wood Chip, Wood Dust, Agriculture Waste Location: Pavia | Italy

# **Technical Project Data:**

Firing Capacity: 37 MWth BMCR: 40.5 tph Steam Parameter: 62 bar(a) | 450°C Plant Type: Heat & Power Generation Plant Capacity: 6.4 MWel

# LAWI Scope of Work:

• EP Supply of *LAWI EtaComb*® Moving Grate Furnace for 40 tph Steam Boiler Cogeneration Plant



# 6 MW Biomass Power Plant, Beyoglu | Turkey

Commissionend since: September 2001 Design Fuel: Naphta Exhaust Gas from Gas Turbine Location: Beyoglu | Turkey

#### LAWI Scope of Work:

• Heat Recovery System with Thermal Oil Heater

# 4.2 MW Biomass Power Plant, Eldoret | Kenia

Commissionend since: March 1999 Design Fuel: Waste Wood Chip, Wood Dust Location: Eldoret | Kenia

#### LAWI Scope of Work:

• EPC Supply of Moving Grate Furnace 34m<sup>2</sup> for Steam Power Plant

# 4.5 MW Biomass Power Plant, Valle Lomellina | Italy

Commissionend since: March 1999 Design Fuel: Rice Husk Location: Valle Lomellina | Italy

## **Technical Project Data:**

Firing Capacity: 20.8 MWth BMCR: 21 tph Steam Parameter: 54 bar(a) | 450°C Plant Type: Power Generation Plant Capacity: 4.5 MWel

#### LAWI Scope of Work:

• EPC Supply of Moving Grate Furnace 29.5 m<sup>2</sup> for 32 tph Steam Boiler



# 8 MW Waste Wood Chip Power Plant, Preding | Austria

# Commissionend since: February 1999 Design Fuel: Waste Wood Chip Location: Preding | Austria

## LAWI Scope of Work:

• EPC Supply of Thermal Oil Boiler for Wood Panel Industry

# 3500 + 250 KW Gas Power Plant, Ravensburg | Germany

Commissionend since: December 1998 Design Fuel: Natural Gas, Digester Gas Location: Ravensburg | Germany

## LAWI Scope of Work:

• EPC Supply of Thermal Oil Boiler for Sewage Treatment Plant

# 2x2 MW Natural Gas Power Plant, Villach | Austria

Commissionend since: April 1998 Design Fuel: Natural Gas Location: Villach | Austria

- LAWI Scope of Work:
  - EPC Supply of Thermal Oil Heating Station



# 2.5 MW Rice Husk Power Plant, Nakhon Ratchasima | Thailand

## Commissionend since: June 1996

Design Fuel: Rice Husk Location: Nakhon Ratchasima | Thailand

# **Technical Project Data:**

Firing Capacity: 17 MWth BMCR: 18 tph Steam Parameter: 33 bar(a) | 420°C Plant Type: Power Plant Co-Generation

## LAWI Scope of Work:

• EPC Supply of Moving Grate Furnace with 18 tph Steam Boiler